



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8960

AUG 22 2019

Major General R. Mark Toy
Commander
U.S. Army Corps of Engineers
Mississippi Valley Division
P.O. Box 80
Vicksburg, Mississippi 39181-0080

Dear Major General Toy:

The U.S. Environmental Protection Agency shares your concerns regarding the significant flooding along the lower Mississippi River and the Yazoo Backwater Area (YBA). We recognize the disruptive impacts of the flooding on the day-to-day lives of Mississippians, their homes, and the economy of the area. We appreciate the on-going dialogue with the U.S. Army Corps of Engineers (the Corps) regarding potential solutions and remain committed to working actively and cooperatively with the Corps concerning our Clean Water Act programs while the Corps considers options for providing flood protection.

On August 2, 2019, the EPA met with representatives from the office of the Assistant Secretary of the Army (Civil Works), the Corps' headquarters, the Corps' Mississippi Valley Division, and the Corps' Vicksburg District to discuss new information the District has generated in connection with the YBA. At the close of the meeting, the District requested that the EPA follow-up with additional feedback regarding its preliminary review of the information provided by the District.

My staff was in Vicksburg this week to continue these discussions. In advance of that meeting, we worked with programmatic and legal experts within the Agency to gain a detailed understanding of the nature and scope of information needed to reconsider the 2008 Clean Water Act Section 404(c) Final Determination (2008 FD).¹ In order to continue to advance these discussions, this letter aims to provide a more thorough summary of the information needed to reconsider the 2008 FD.

The 2008 FD was based primarily on data and information provided by the Corps indicating that the YBA Pumps Project could significantly degrade the ecological functions provided by 67,000 acres of wetlands in the YBA, including those functions that support wildlife and fisheries resources. In January 2019, the District indicated interest in exploring the kind of information and analysis that might be necessary for the EPA to consider modifying or withdrawing its 2008 FD. Subsequently, the District provided EPA with new information, developed over the last 10 years, which might provide a factual basis for a reconsideration of the 2008 determination.

The 2008 FD sets forth the EPA's rationale for its Section 404(c) decision using data, information, and analysis from the Corps, the EPA, U.S. Fish and Wildlife Service (USFWS), and others that was

¹Available at: <https://www.epa.gov/cwa-404/yazoo-backwater-area-pumps-project>.

available at the time. The 2008 FD was based on an extensive administrative record, and any review of this decision will need to consider many of these same factors and how they may have changed in the intervening years. In part, the information in the administrative record included scientific data and literature available at that time, as well as information from the Corps' more than 5,000-page Final Supplemental Environmental Impact Statement issued in October of 2007 (FSEIS),² information from an EPA-led Environmental Monitoring and Assessment Program (EMAP) field survey to determine wetland extent, data from other resource agencies including the USFWS, and EPA's analysis of some of the information in the FSEIS.

In the 2008 FD, the Agency focused its consideration on information regarding baseline and modelled effects on the extent, frequency, and duration of flooding in the YBA, with and without the Pumps Project (FSEIS Appendix 6 – Engineering Summary) and the modeling conducted by the Corps on the flood extent, acreage of impact, and the type and magnitude of impacts the Pumps Project would have on wetlands (FSEIS Appendix 10 – Wetlands). The EPA also reviewed the Mitigation Appendix (Appendix 1) in light of the results from the Corps' hydrologic analysis, flood extent modelling, and wetland impact assessment. The 2008 FD identified concerns regarding the compensatory mitigation proposed in the FSEIS, including the lack of specific compensation sites, the lack of information necessary to evaluate the merits of potential compensation sites, the inadequate amount of proposed compensation to offset impacts, and the potential lack of suitable sites in the target area to satisfy compensation needs. The EPA also reviewed the Aquatics Appendix (Appendix 11) and the Water Quality Appendix (Appendix 16) to compare the results of the hydrologic analysis, wetland extent assessment, and State of Mississippi water quality data to the information presented in the two appendices.

In addition, the administrative record included relevant scientific literature as well as a report submitted by the USFWS on the potential effects of the Pumps Project on fisheries, waterfowl, migratory birds, amphibians, and reptile species known to occur in the YBA. In this report, the USFWS highlighted its concerns that the proposed project would significantly degrade the wildlife habitat provided by its four National Wildlife Refuges located within the YBA.

Over the course of the last few months, the Corps and the EPA have been discussing information the Corps has compiled and provided to EPA regarding wetlands, water quality, and fisheries in the YBA. As part of these recent discussions, the EPA has received the following new information from the Corps relating to the YBA:

- Published papers tracking the restoration recovery of forested wetlands in the Lower Mississippi Delta [Received December 2018];
- Draft manuscript regarding wetland hydrology in the YBA [received 06/03/2019];
- Preliminary assessment of wetland functions in the YBA [received 07/12/2019];
- Fact Sheet on the Effects of Low Dissolved Oxygen on Fishes of the Yazoo Backwater [received 07/18/2019]; and
- Preliminary Summary of the U.S. Geological Survey Mercury Sampling Effort in the Delta National Forest, Mississippi, 2004-2019 [received 7/18/2019].

² Available at: <https://www.mvk.usace.army.mil/Missions/Programs-and-Project-Management/Project-Management/Yazoo-Backwater-Report/>.

In addition, recent discussions with the District indicate that modelling approaches (hydrologic and flood extent) may have changed from the 2007 FSEIS and that the period of record used for these analyses may also have changed. In order to evaluate this new information, given the existing administrative record, the EPA needs a fuller explanation and understanding of the basis for and extent of the changes to wetlands impacts, as well as an analysis of the differences between former and present models and analysis. The information provided by the Corps thus far touches on various aspects of the project, but it is not sufficiently comprehensive in the context of the analysis conducted in the FSEIS, to provide the type of record that would be required to evaluate a potential modification or withdrawal. The information provided to date does not approach the type of detail, documentation, statistical analysis, or interpretation as the information previously provided.

For example, the Corps' July 2019 preliminary assessment of wetland functions indicates a significant decrease in the baseline estimate of wetland acreage in the YBA in comparison to the EMAP findings incorporated in the FSEIS and 2008 FD. The Corps' July 2019 preliminary assessment also indicates a 70% decrease in wetland acres impacted in the YBA in comparison to the findings in the FSEIS and 2008 FD. The Corps has thus far not presented the data to support the new conclusions associated with the re-analysis of previous HGM and flood models, particularly in terms of rationale, assumptions, input parameters, analysis and interpretation, and uncertainty related to the recent, as compared to the former information used. Based upon our initial review of the new information provided by the Corps, we agree that the circumstances may have changed since the 2008 FD, but believe revisions to the following technical data, analyses, interpretations, and conclusions previously provided by the Corps are needed to fully understand differences between the new information and the FSEIS. Specifically, we request the following additional information³:

- Information comparable to the level of detail and analysis included in Appendix 1 (Mitigation) will need to be provided to reflect a revised HGM analysis, address certain deficiencies identified in our 2008 FD, and adequate mitigation (33 CFR Part 332 / 40 CFR Part 230, Subpart J);
- Information comparable to the level of detail and analysis included in Appendix 6 (Engineering Summary) will need to be provided incorporating recent gage data and the results of any new modelling approaches;
- Information comparable to the level of detail and analysis included in Appendix 7 (Economic Analysis) will need to be provided to reflect revisions to the flood modelling and recent land use/landcover data;
- Information comparable to the level of detail and analysis included in Appendix 10 (Wetlands) will need to be provided to include the new impact analysis including a sufficient rationale and discussion of the change in flood modelling, wetland extent, and impacts given past estimates; and
- Information comparable to the level of detail and analysis included in Appendix 11 (Aquatics) and Appendix 16 (Water Quality) will need to be correlated with updated

³ Given the significant change in the Corps' conclusions about project impacts based on new data and information, the extensive administrative record behind the FSEIS and the 2008 FD, as well as the significant level of interest demonstrated by the public and various stakeholders regarding this project, the EPA recommends that any new studies or information generated for this project meet data quality standards.

hydrologic and flood extent information and any relevant analysis or conclusions associated with the new water quality information provided by the Corps.

Further, the Corps should examine the technical information provided in portions of the Main Report that was dependent on information in these appendices and provide the EPA with any updated information and conclusions. In addition, to fully understand the limits of the new information, a discussion of model error and uncertainty should be updated and included with each section. To the extent the Corps believes there is any new relevant data, information or conclusions associated with USFWS information regarding the potential effects of the project on fisheries, waterfowl, migratory birds, amphibians, and reptile species known to occur in the YBA, such information should also be provided.

If the Corps would like to request the EPA consider a modification to or withdrawal of EPA's 2008 FD, the District should submit that request along with the additional information described herein. The EPA's Section 404(c) regulations do not currently have an explicit process that addresses the administrative procedure the EPA must follow to modify or withdraw a Final Determination. However, when modifying a Final Determination under 404(c) in the past, the EPA has provided notice and comment prior to a new final decision.⁴

I want to underscore that the EPA is committed to working with the Corps concerning our Clean Water Act obligations while the Corps considers solutions to the flooding issue in the YBA. My staff appreciated the opportunity to meet with yours in Vicksburg this week to further discuss this information and to discuss potential solutions. The EPA will continue to review the information submitted by the Corps and any new information provided in the future and inform the Corps of any comments or questions as they arise. Please contact me at any time if you have questions or need additional information, or have a member of your staff contact Jeanneanne M. Gettle, Director of the EPA Region 4 Water Division, at 404-562-8979.

Sincerely,



Mary S. Walker
Region 4 Administrator

⁴ The EPA has modified three Final Determinations it has made pursuant to Clean Water Act Section 404(c); the EPA has not withdrawn a Final Determination. For more information regarding the EPA's 404(c) Final Determinations, see: <https://www.epa.gov/cwa-404/chronology-cwa-section-404c-actions>.